

~~Please replace claims 1, 5, 6, 8, 9, 13, 14, 16 and 18 with amended claims as follows.~~

1. (Three times amended) A method of regulating the expression of a recombinant nucleic acid sequence encoding a polypeptide which is immunogenic in a mammal; the method comprising introducing, into a mammal that has made an immune response to said immunogenic polypeptide, a cell comprising a vector comprising a nucleic acid encoding said immunogenic polypeptide, operably linked to a tetracycline-regulatable promoter; and altering the concentration of tetracycline or an analog thereof to which the cell is exposed so as to achieve in said mammal expression of said nucleic acid sequence as permitted in the presence or absence of tetracycline or an analog thereof.

2. (Twice amended) The method of claim 1 or claim 19, wherein prior to said introducing step, said mammal has circulating antibodies which react with said immunogenic polypeptide.

3. (Twice amended) The method of claim 1 or claim 19, wherein prior to said introducing step, said mammal has immunocompetent memory cells which are specific for said immunogenic polypeptide.

4. (Three times amended) The method of claim 1 or claim 19, wherein expression of said immunogenic polypeptide is inhibited in vitro by exposure of the cell to tetracycline or an analog thereof, and wherein expression in the mammal is induced after 2 days following removal of exposure to tetracycline or an analog thereof.

5. (Three times amended) The method of claim 1 or claim 19, wherein expression of said immunogenic polypeptide is inhibited in vitro by the absence of tetracycline or an analog thereof and wherein expression in the mammal is induced to a maximum level after 2 days by administration of tetracycline or an analog thereof to the mammal.

6. (Twice amended) The method of claim 1 or claim 19, wherein said vector is a viral vector.

7. (Twice amended) An isolated leukocyte transformed with a nucleic acid sequence encoding a polypeptide which is immunogenic to a mammal, the nucleic acid sequence being operably linked to a tetracycline-regulatable promoter, such that expression of the immunogenic

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CONT.
polypeptide by the leukocyte is controlled by altering the concentration of tetracycline or an analog thereof to which the leukocyte is exposed after introduction to a mammal.

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16. A composition comprising a plurality of a leukocyte of claim 14 and a physiologically acceptable diluent.

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18 A method of regulating the expression of a nucleic acid sequence encoding a heterologous polypeptide in a leukocyte, comprising introducing into the leukocyte the nucleic acid coding sequence operably linked to a tetracycline-operator sequence, and a sequence encoding a tetracycline-sensitive DNA-binding expression-regulating polypeptide; and altering the concentration of tetracycline or an analog thereof to which the leukocyte is exposed, thereby regulating the expression of the coding sequence.

Please add new claims as follows:

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19. (New) A method of regulating the expression of a recombinant nucleic acid sequence encoding a polypeptide which is immunogenic in a mammal, the method comprising introducing a cell into said mammal, said cell comprising a vector comprising a nucleic acid encoding said polypeptide, said nucleic acid operably linked to a tetracycline-regulatable promoter; wherein prior to introduction of the cell into the mammal the expression of the polypeptide is inhibited in vitro, and altering the concentration of tetracycline or an analog thereof to which the cell is exposed in said mammal, so as to achieve in said mammal expression of said nucleic acid sequence as permitted in the presence or absence of tetracycline or an analog thereof.

20. (New) The method of claim 19 wherein expression of the polypeptide encoded by said nucleic acid sequence reaches a maximum level in said mammal after 2 days.

REMARKS

At the outset, Applicants would like to thank the Examiner for the telephone interview in which the Examiner agreed to consider material in the specification and in the prior art supporting the enablement of therapeutic and non-therapeutic embodiments of the invention, and in which the distinctions of the claimed invention were more clearly defined over the cited prior art.